



City of Tempe

PLANT ELECTRICIAN (SBP)

JOB CLASSIFICATION INFORMATION

<i>Job Code:</i>	464	<i>FLSA Status:</i>	Non-Exempt
<i>Department:</i>	Municipal Utilities	<i>Salary / Hourly Minimum:</i>	\$28.243269
<i>Supervision Level:</i>	Non-Supervisor	<i>Salary / Hourly Maximum:</i>	\$33.186058
<i>Employee Group:</i>	NSU	<i>State Retirement Group:</i>	ASRS
<i>Status:</i>	Classified	<i>Market Group:</i>	Plant Operator+ (SBP)
<i>Drug Screen / Physical:</i>	Y	<i>EEO4 Group:</i>	Skilled Craft

DISTINGUISHING CHARACTERISTICS

Positions in this class may be given the opportunity or be required to learn and perform duties in other skill/trade areas (i.e. skill blocks), including automated instrumentation and control work, mechanical maintenance, water plant operations and/or wastewater plant operations.

REPORTING RELATIONSHIPS

Receives supervision from the Plant Supervisor or from other supervisory staff. May be required to direct and coordinate other trades, contractors, vendors, engineers and other divisions within the City.
May act as a subject matter expert to assist in training other staff.

MINIMUM QUALIFICATIONS

<i>Experience:</i>	Requires two years of experience as a skilled journeyman electrician, including experience with 4160 medium voltage applications, preferably in a water/wastewater utility or industrial setting.
<i>Education:</i>	Equivalent to the completion of the twelfth grade supplemented by graduation/completion from/of an accredited electrical apprentice or trade school program or licensure/certification related to the electrical trade.
<i>License / Certification:</i>	<p>Must possess and maintain a valid driver's license.</p> <p><u>When Assigned to Water Plant:</u> Requires possession of, or obtain within six months of hire a Grade 1 Arizona Department of Environmental Quality (ADEQ) Certification in Water Treatment</p> <p><u>When Assigned to Field Site Services:</u> Requires possession of, or obtain within six months of hire a Grade 1 ADEQ certification in Water Distribution and Wastewater collections.</p>

ESSENTIAL JOB FUNCTIONS

Essential job functions are the fundamental duties of a position: the things a person holding the job absolutely must be able to do.

To actively support and uphold the City's stated mission and values. To perform a variety of complex technical and skilled electrical work in the planning, installation, alteration, maintenance and repair of equipment for electrical systems in water and wastewater facilities.

OTHER DUTIES AS ASSIGNED

Please note this job description is not designed to cover or contain a comprehensive listing of all activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

- Install, alter, maintain and repair electrical wiring systems, including 120/240-volt, 277/480-volt, and 4160-volt wye and delta. Perform a variety of other maintenance tasks on equipment including motors up to 1250 HP, coils, transformers, power panels and motor control centers and control equipment.
- Install, troubleshoot, maintain and repair various types of luminaries and lighting systems including UV disinfection systems.
- Troubleshoot, maintain and repair Chlorine generation equipment.
- Test, run and maintain plant generation equipment including the documentation for regulatory agency requirements.
- Install, test and maintain various Uninterruptible Power Supply Systems (UPS).
- Install and maintain water pumps and process control schemes at booster stations, well sites, lift stations and other remote sites.
- Assist staff with trade-specific information regarding electrical systems during routine maintenance, new construction and upgrades. Establish operating criteria and standard operating procedures for successful operation of electrical systems.
- Order, install and test all new equipment.
- Repair and maintain chemical feeders, mixers and controllers.
- Operate ammeters, ohmmeters, voltage meters from 600-volt to 5000-volt, specialized data logging instruments, power monitoring meters, thermal imaging instruments, 600-volt and 5000-volt megohm meters and vibration monitors.
- Maintain and calibrate accurate test instruments.
- Ability to troubleshoot and repair equipment controlled by programmable logic controllers (PLC's).
- Inspect fuses, buss bars, thermocouples and electrical contacts for loose connections.
- Inspect and repair, relays, time clocks, timers, photocells, contactors, electronic motor savers, solenoids, pressure switches and thermal overload unit.
- Install and inspect transient voltage surge suppressor (TVSS) units and cathodic protection systems.

- Install, troubleshoot and repair variable frequency drives (VFDs), motor soft starts and wye/delta motors.
- Maintain preventive maintenance files, including motor data inventory, CMMS work orders (using Hansen or other software systems), information from data loggers, data from the power monitoring meters and data on the operation of all electrical equipment.
- Document and maintain current online diagrams for all Water Utility sites.
- Demonstrate continuous effort to improve operations, decrease turnaround times, streamline work processes and work cooperatively and jointly to provide quality seamless customer service.
- Proficient in Microsoft Office applications.
- Perform related duties as assigned.

PHYSICAL DEMANDS AND WORK ENVIRONMENT

- Lift heavy objects (motors, conduit and ladders) up to 75 pounds;
- Move heavy objects with forklift, dolly, overhead cranes and lifts etc. up to 400 pounds;
- Operate city vehicles (pick-up truck);
- Use power tools (drills, pipe threader and saws);
- Use tools (screwdrivers, hammers and wrenches);
- Climb stairways, ladders and work on elevated structures (some electrical equipment is located on top of elevated structures);
- Traverse uneven surfaces;
- Work in a stationary position for considerable periods of time (wiring motors, kneeling, standing and sitting);
- Operates computers, calculators and other office equipment (manages electrical equipment databases on computer);
- Extensive reading and close vision work (reading blueprint and diagrams);
- Work in confined areas;
- Work out-of-doors in inclement weather (key equipment can breakdown during storms);
- Exposure to heat, cold, dampness, dust, pollen, odors, fumes, etc.;
- Exposure to hazards of electrical shock, falls, noise, equipment operation, etc.;
- May require working extended hours (electricians are assigned stand-by shifts outside their normal work shift).

COMPETENCIES

<i>CLASSIFICATION LEVEL</i>	<i>INCLUDES</i>	<i>COMPETENCIES</i>
Foundational	All Employees	Inclusion, Communication, Interpersonal Skills, Integrity, Professionalism and Willingness to Learn
Non-Supervisory	In Addition >	Teamwork, Customer Service, Initiative and Dependability / Reliability
Supervisory	In Addition >	Staffing, Monitoring Work, Delegating, Development / Mentoring and Support Others

Manager	In Addition >	Preparing / Evaluating Budgets, Monitoring / Controlling Resources and Motivating / Inspiring
Deputy Director	In Addition >	Entrepreneurship and Networking
Director	In Addition >	Organizational Vision
<p><i>For more information about the City of Tempe's competencies for all classifications:</i></p> <p>City of Tempe, AZ : Competencies</p>		

JOB DESCRIPTION HISTORY

Effective February 2000

Revised November 2001

Revised June 2005

Revised May 2017 (added physical/mental activities)

Revised September 2017 (update min qualifications)

Revised March 2019 (PW Reorg – Moved to Municipal Utilities)

Revised December 2020 (MQ's experience, education, certifications, added assignments per req'd. certifications and edited other duties)